

ON A COLLECTION OF NON-MARINE SHELLS, FORMED BY
MR. J. J. WALKER, IN THE NEW HEBRIDES.

By E. R. SYKES, B.A., F.L.S., etc.

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THE shells noticed in the following pages were collected by Mr. J. J. Walker during the cruise of H.M.S. "Ringarooma" in the New Hebrides between June and October, 1900. The collection is of interest, not only on account of the three new forms discovered, but also for the very careful localization of the species, which forms a useful contribution to our knowledge of the fauna of those islands. All the specimens have been kindly presented by Mr. Walker to the British Museum.

1. RHENEA RAPIDA (Pfr.).

Hab.—Port Fila, Efate.

2. MICROCYSTIS GUTTULA (Gould).

Hab.—Port Fila, Efate.

I consider that *Hyalina Layardi*, Thomson (Proc. Zool. Soc., 1885, p. 25), is only a synonym for this well-known species.

3. TROCHOMORPHA RUBENS, Hartman.

Hab.—Terebu and Renée River, Espiritu Santo; Havannah Harbour, Efate.

4. TROCHOMORPHA CONVEXA, Hartman.

Hab.—Terebu and Renée River, Espiritu Santo.

5. TROCHOMORPHA, sp.

Hab.—Ravenga, Vanua Lava; Renée River, Espiritu Santo.

A puzzling form, approaching *T. approximata*.

6. DENDROTRUCHUS LAYARDI (Hartman).

Hab.—Renée River, Espiritu Santo.

7. DENDROTRUCHUS EVA (Pfeiffer).

Hab.—Port Fila, Efate.

8. DENDROTRUCHUS STRAMINEUS, n.sp. (Fig. I.)

Shell belonging to the group of *D. Eva*, but more depressed, much smaller and thinner, being almost translucent, and of a pale yellowish-white colour, with half a whorl less. The surface is finely malleated,

producing somewhat the effect of spiral striation. The mouth is subquadrate, with a lightly thickened white lip. Alt. 7·5, diam. max. 12 mm.

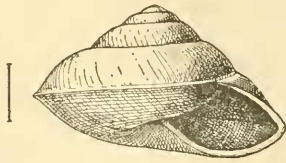


FIG. I.—*Dendrotrochus stramineus*, n.sp.

Hab.—Lo; Vanua Lava.

Four specimens, three being immature, but all in good condition, from the former, and one dead shell from the latter locality.

9. DRAPARNAUDIA WALKERI, n.sp. (Fig. II.)

T. sinistrorsa, anguste umbilicata, trochiformis, solidiuscula, oblique striata, apice subacuto; anfr. 6, plano-convexi, ultimus obsolete carinatus; apertura perobliqua, subovalis; peristoma tenue, margine externo subreflexo, columellari superne in laminam triangularem reflexo. Alt. 6·5, diam. max. 6 mm.

Hab.—Renée River, Espiritu Santo.

At first I was under the impression that *D. singularis* (Pfr.), which is described as “*subacute carinatus*,” had been misunderstood, and that

the present form belonged there; but since there exists in the British Museum a tablet of the form known under the name of *singularis*, bearing on the back, in Pfeiffer’s writing, the name and original locality, I have felt compelled to describe the species under consideration. It may be readily separated from *D. singularis* by its smaller size, and by its being only slightly, instead of strongly, keeled; while, as compared with the specimen of Gassies’ *D. turgidula*, from his collection, and now



FIG. II.—*Draparnaudia Walkeri*, n.sp.

in the British Museum, the present shell is a trifle more conic, while the whorls are flatter, and the suture not so deeply impressed.

10. PLACOSTYLUS SALOMONIS (Pfr.).

Hab.—Terebu, Espiritu Santo.

11. PLACOSTYLUS HARTMANI, Kobelt.

Hab.—Terebu and Renée River, Espiritu Santo.

12. PLACOSTYLUS BICOLOR (Hartman).

Hab.—Renée River, Espiritu Santo.

13. PLACOSTYLUS (?) BERNIERI (Hartman).

Hab.—Renée River, Espiritu Santo.

14. DIPLOMORPHA DELANTOURI, Hartman.

Hab.—Renée River, Espiritu Santo.

15. DIPLOMORPHA LAYARDI, Hartman.

Hab.—Port Fila and Undine Bay, Efate.

16. PARTULA FRATERNA, Hartman.

Hab.—Ravenga, Vanua Lava; Lakona, Gana.

17. PARTULA AURANIANA, Hartman.

Hab.—Lo and Hiu, Torres Is.

Mr. H. H. Smith, who kindly compared a specimen from each locality with Hartman's type, notes that the Hiu Island form is "indistinguishable from the type," while of the Lo Island shells he writes that they are "near *auraniana*, but there is nothing exactly like it in the collection." I consider this latter to be only a local race.

18. PARTULA PYRAMIS, Hartman.

Hab.—Renée River and Terebu, Espiritu Santo.

One specimen from the former locality was kindly identified by Mr. H. H. Smith, who notes "apparently *P. pyramis*, Hartman. There are two examples in coll. Hartman, one of which is slightly abnormal, and neither is in first-rate condition, as they are weathered, but the yellow periostracum still shows. *P. albescentis* is close, but has flatter whorls." I strongly suspect that the two will prove to be forms of the same species, and that the synonymy will include *P. churnea*, *P. eximia*, and *P. proxima*, all of Hartman, which forms may be local races, but not, I think, valid species.

19. RHACHIS MAGENII (Gassies).

Hab.—Port Fila, Efate.

One specimen only.

20. SUBULINA OCTONA (Chemn.).

Hab.—Port Fila, Efate.

21. OPEAS OPARICA, Pfr.

Hab.—Port Fila, Efate; Vanua Lava; Valua (Banks Is.).

22. SUCCINEA, sp.

A single specimen from Valua (Banks Is.); and one also from Port Fila, Efate.

23. PYTHIA WALLACEI, Pfr.

Hab.—Undine Bay, Efate.

24. MELAMPUS LUTEUS, Q. & G.

Hab.—Resolution Bay, Tanna.

25. MELAMPUS FASCIATUS, Desh.

Hab.—Resolution Bay, Tanna.

A small variety.

26. MELAMPUS PARVULUS, Nuttall.

Hab.—Resolution Bay, Tanna.*M. Dupontianus*, Morel., appears to be a synonym.

27. MELAMPUS, sp.

Hab.—Port Fila, Efate.

28. *AURICULUS ELONGATUS*, Parr.

Hab.—Resolution Bay, Tanna.

29. *MELANIA COSTATA*, Q. & G.

Hab.—Havannah Harbour, Efate.

30. *MELANIA ASPIRANS*, Hinds.

Hab.—Havannah Harbour, Efate.

One specimen is evenly spirally striate all over, not on the lower portion of the whorls only, but it is, I think, only a variety.

31. *MELANIA FULGURANS*, Hinds.

Hab.—Havannah Harbour, Efate.

32. *MELANIA LEEFEI*, Brot.

Hab.—Havannah Harbour, Efate.

33. *MELANIA*, sp.

Hab.—Renée River, Second Channel, Espiritu Santo.

One specimen; it is allied to *M. Leepei*, Brot, but the shell is more elongate, and the earlier whorls are longitudinally ribbed. Compared with *M. fulgurans*, Hinds, which it resembles in sculpture, the whorls are more inflated and the spirals more marked.

34. *MELANIA SCPIO*, Gould.

Hab.—Valua (Banks Is.).

M. verruculum, Morel., is a synonym.

35. *TRUNCATELLA VALIDA*, Pfeiffer.

Hab.—Resolution Bay, Tanna.

Probably this is the same shell as was recorded from the New Hebrides by Mons. Mabille under the name of *T. pacifica*, Pease.

36. *OSTODES FORNICATUM* (Pfr.).

Cyclostoma fornicatum, Pfeiffer: Proc. Zool. Soc. London, 1852, p. 146.

„ *Recluzianum*, Pfeiffer: op. cit., 1853, p. 51.

Hab.—Port Fila, Efate.

Var. *MACGILLIVRAYI* (Pfr.).

Cyclotus Macgillivrayi, Pfeiffer: Proc. Zool. Soc. London, 1855, p. 103.

Hab.—Renée River, Espiritu Santo; Port Fila, Efate.

These forms are very difficult to deal with satisfactorily, but I have, fortunately, had the advantage of examining the original series in the British Museum. *O. fornicatum* and *O. Recluzianum* appear to be absolutely identical, while *O. Macgillivrayi* is a larger form, with the last whorl more rounded and the spire more produced. I have not, however, been able to satisfactorily divide the series, and intermediate forms occur. The largest specimens measure over 14 mm. in diameter. Kobelt and Moellendorff place *O. fornicatum* in *Lagocheilus* and the others in *Gonatorhappe*, but I think they really belong to *Ostodes*.

37. *OMPHALOTROPIS VARIANS*, Moellendorff?

Hab.—Port Fila, Efate.

The specimens are dead, but from the diagnosis and dimensions given I believe them to belong to this unfigured species.

38. *OMPHALOTROPIS*, sp.*Hab.*—Renée River, Espiritu Santo.

A single dead shell, belonging to the same group as the last species.

39. *OMPHALOTROPIS CONELLA*, n.sp. (Fig. III.)

FIG. III.

Omphalotropis conella, n.sp.

Testa perforata, ovato-conoidalis, opaca, solidula, brunnea, spira bene elata; anfr. $6\frac{1}{2}$, plano-convexi, liris numerosis cincti, ultimus ad peripheriam carinatus, circa perforationem fortius filo-carinatus, sutura bene impressa, apertura angulato-ovalis, peristomate simplici, margine columellari subreflexo. Alt. 4.2, diam. max. 3.1 mm.

Hab.—Port Fila, Efate.

A pretty little shell, somewhat trochoid in shape, with numerous spiral liræ.

40. *PUPINA CUMINGIANA*, Pfr.*Hab.*—Resolution Bay, Tanna.41. *HELICINA SUBLÆVIGATA*, Pfr.*Hab.*—Port Fila, Efate; Terebu and Renée River, Espiritu Santo; Valua; Vanua Lava; Gana; Hiu; Lo.

A very variable shell in colour, shape, and size; I believe *H. Layardi*, Hartm., to be a synonym.

42. *HELICINA ARTICULATA*, Pfr.*Hab.*—Port Fila, Efate.43. *NERITINA SUBGRANOSA*, Recl.*Hab.*—Havannah Harbour, Efate.44. *NERITINA WALLISIANA*, Recl. (= *variegata*, Lesson).*Hab.*—Vanua Lava; Valua (young shells).45. *NERITINA BICOLOR*, Recl. (?).*Hab.*—Renée River, Second Channel, Espiritu Santo.46. *SEPTARIA SUBORBICULARIS*, Sby.*Hab.*—Renée River, Espiritu Santo; Valua.